

BookletChartTM

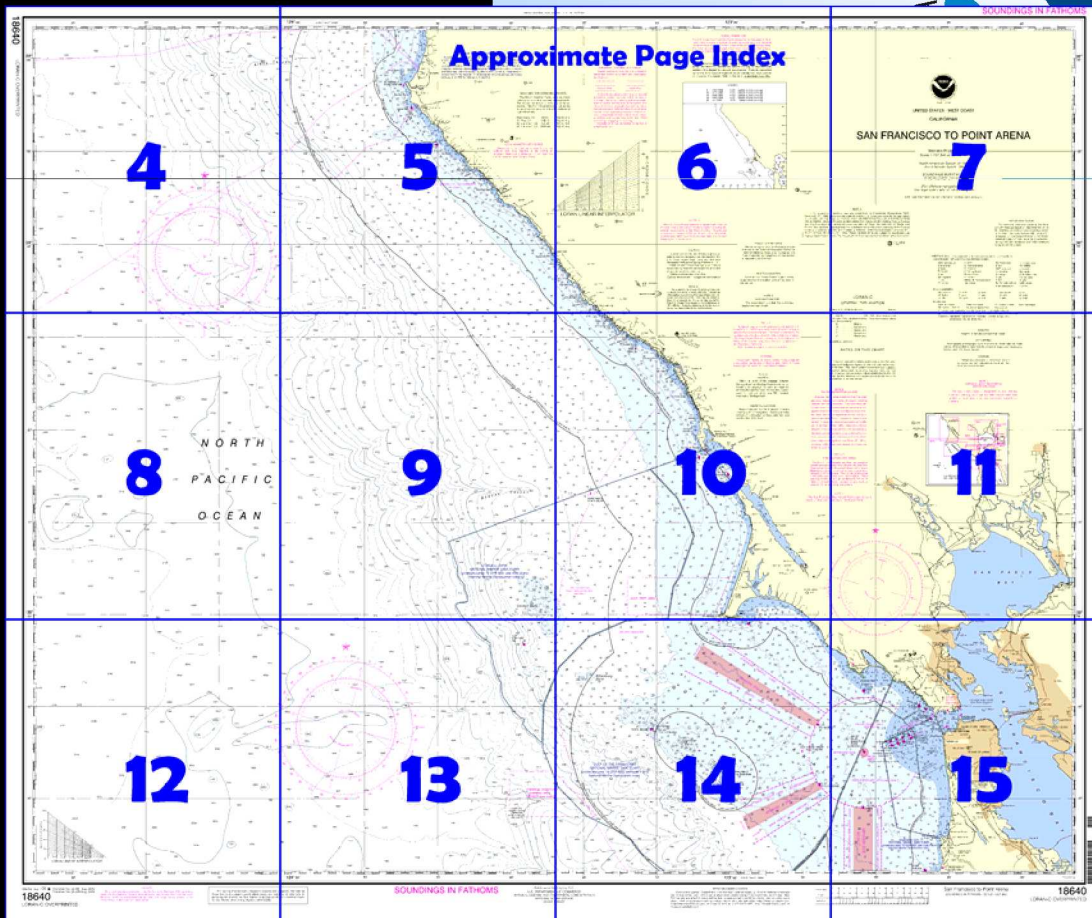
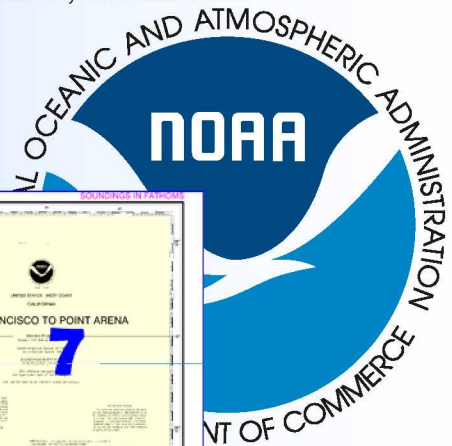
San Francisco to Point Arena

(NOAA Chart 18640)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

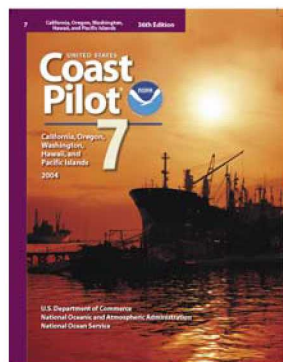
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 7 & 8 excerpts]

(59) The **Gulf of the Farallones National Marine Sanctuary** has been established to protect and preserve the marine birds and mammals, their habitats, and other natural resources in the waters surrounding the Farallon Islands and Point Reyes, and to ensure the continued availability of the area as a research and recreational resource.

(60) **Farallon Islands**, 23 miles W of San Francisco Bay entrance, are rocky islets

extending NW for 7 miles. **Southeast Farallon**, the largest of the group, actually consists of two islands separated by a narrow impassable gorge. (65) **Cordell Bank**, 27 miles NW of Farallon Light and 20 miles W of Point Reyes, is about 6 miles long and 3 miles wide; the bank is covered 20 to 40 fathoms, but depths increase rapidly outside it.

(66) The **Cordell Bank National Marine Sanctuary** has been established to protect and conserve the special, discrete, highly productive marine area of Cordell Bank and its surrounding waters and to ensure the continued availability of the areas ecological, research, educational, aesthetic, historical, and recreational resources.

(70) **Drakes Bay**, named after English explorer Sir Francis Drake, who anchored here in 1579, is NE of the 1-mile-long 200-foot-high, narrow peninsula that forms the easternmost part of Point Reyes.

(78) **Bolinas Bay**, E of Duxbury Point, is an open bight 3.5 miles wide between Duxbury Point and Rocky Point.

(270) **San Francisco**, one of America's great cities, occupies the N portion of the peninsula forming the S entrance to the bay.

(284) The **Port of San Francisco** is the oldest on the Pacific coast.

Though primarily a general cargo port, grain, bulk liquids, containers, newsprint, automobiles, bananas, copra, cotton, and other commodities are handled here. San Francisco is a popular port of call for passenger vessels on regular scheduled and special cruises.

(386) **Oakland**, on the E or mainland shore opposite San Francisco, is the second largest city on San Francisco Bay.

(479) **San Pablo Bay**, is nearly circular, 10 miles long in a NE direction, with a greatest width of 8 miles.

(502) **Napa River**, the continuation of Mare Island Strait above the naval shipyard, is used by barges and pleasure boats.

(8) The **Gulf of the Farallones National Marine Sanctuary**, has been established to protect and preserve the marine birds and mammals, their habitats, and other natural resources in the waters surrounding the Farallon Islands and Point Reyes, and to ensure the continued availability of the area as a research and recreational resource

(9) **Bodega Bay**, a broad opening between Tomales Point and Bodega Head, affords shelter from NW weather at its N end, but is dangerous in S or W weather. The summit of **Bodega Head** is rounding and grassy, with steep rocky cliffs on the S and W ends. Low **Bodega Rock** and foul ground extend from 0.2 to 0.7 mile SE of the S face of Bodega Head.

(10) **Bodega Marine Life Refuge** is just north of Bodega Head.

(16) **Tomales Bay** enters the S part of Bodega Bay E of Tomales Point, and extends SE for 12 miles with an average width of 0.5 mile.

(20) **Bodega Harbor**, in the N part of Bodega Bay, is an important commercial fishing base and, in season, an active sports fishing and recreation harbor.

(29) Numerous rocks, 20 to 130 feet high, are within 0.3 miles of the shore, but some extend as much as a mile offshore. **Gull Rock**, 100 feet high, is 1.7 miles SE of the mouth of Russian River and 0.3 mile offshore.

(30) **Duncans Landing**, 6 miles N of Bodega Head, is a fair small-boat landing in NW weather.

(32) **Ross Mountain**, 3 miles inland and N of Russian River, is the highest knob on the ridge. A few clusters of trees are near its summit; the slopes are bare of trees and the gulches are wooded.

(33) From Russian River for 6.5 miles to Fort Ross Cove, the coast is high, consisting of bare steep spurs from Ross Mountain. **Sunken Reef** extends 0.8 mile from shore 4.5 miles NW of Russian River; it is marked by a bell buoy.

(34) **Fort Ross Reef**, 5.7 miles NW of Russian River and nearly 1 mile SE of Fort Ross Cove, consists of pinnacle rocks 35 feet high, 600 yards offshore, and connected with the beach by a reef which is partially marked by kelp.

(35) **Fort Ross Cove**, 15.5 miles N of Bodega Head and 33 miles N of Point Reyes, affords good shelter in NW weather.

(43) **Gualala Point**, 16 miles SE of Point Arena and 1 mile S of Gualala River, is 42 feet high, about 300 yards offshore, and connected with the bluff by a rocky reef covered with sand. Sand dunes extend behind the bluff for 600 yards.

(45) **Gualala River** intersects the coast 15 miles SE of Point Arena. A long sand beach extends a mile S from the mouth. The white hotel building at **Gualala** can be seen from the W and SW.

Table of Selected Chart Notes

Corrected through NM Aug. 20/05
Corrected through LNM Aug. 23/05

HEIGHTS

Heights in feet above Mean High Water.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.280" southward and 3.926" westward to agree with this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

NOTE C

CAUTION

When the width of the passage between Bodega Head and Bodega Rock is reduced by breakers, the passage is unsafe and mariners entering Bodega Bay from the sea should pass south of red and white buoy "BA" located southeast of Bodega Rock.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution. Station positions are shown thus:
○ (Accurate location) ◌ (Approximate location)

CAUTION

SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

NOTE B

MAIN SHIP CHANNEL

The project depth is 55 feet. For controlling depths see chart 18649.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Point Arena, CA	KIH-30	162.55 MHz
Mt. Pise, CA	KHB-49	162.40 MHz
Mt. Umunhum, CA	KEC-49	162.55 MHz
Mt. Umunhum, CA	WWF-64	162.45 MHz

% of 2238

LOCAL MAGNETIC DISTURBANCE

Differences of as much as 4° from the normal variation have been reported in the vicinity of Saunders Reef, and a difference of 8° from the normal variation near Gualala Point.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the Office of the District Engineer, Corps of Engineers in San Francisco, California. Refer to charted regulation section numbers.

NOTE H

The San Francisco Bay Vessel Traffic Service is not shown on this chart. See charts 18645 and 18649.

NOTE J

The U.S. Coast Guard operates a Vessel Traffic Service Offshore Vessel Movement Reporting System covering the seaward approaches to San Francisco Bay. Vessels are requested to monitor VTSSF on Channel 12 at 15 and 45 minutes past each hour for broadcast reports of known shipping traffic in the area.

NOTE F

PRECAUTIONARY AREA

Traffic within the Precautionary Area may consist of vessels making the transition between the Main Ship Channel and one of the established traffic lanes. Mariners are advised to exercise extreme caution when navigating within this area. The normal cruising area of the pilot vessel is indicated "PILOT AREA". When passing Traffic Lane Lighted Buoys "S", "W", or "N", inbound vessels should contact the pilot boat on channel 13 for boarding instructions.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: --- --- ---

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9940.....99,400 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M.....Master
W.....Secondary
X.....Secondary
Y.....Secondary
Z.....Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the 1/4 nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

Additional information can be obtained at nauticalcharts.noaa.gov.

NOTE G CHEMICAL MUNITION DUMPING AREA-RESTRICTION

Site was formerly used or designated for U.S. chemical munitions dumping. Such use has been discontinued. Designation of such area in no way constitutes authority for dumping.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

NOTE X

The 12 nautical mile territorial sea was established by Presidential Proclamation 5928, December 27, 1988, and is also the outer limit of the U.S. contiguous zone for the application of domestic law. The 3 nautical mile line, previously identified as the outer limit of the territorial sea, is retained because the proclamation states that it does not alter existing State or Federal law. The 9 nautical mile natural resources boundary off Texas, the Gulf coast of Florida, and Puerto Rico, and the 3 nautical mile line elsewhere remain the inner boundary of the Federal fisheries jurisdiction and the limit of states' jurisdiction under the Submerged Lands Act (P.L. 83-31, 67 Stat. 29, March 22, 1953). These maritime limits are subject to modification, as represented on future charts. The lines shown on the most recent chart edition take precedence.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
A/ alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	OC occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	GrS grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

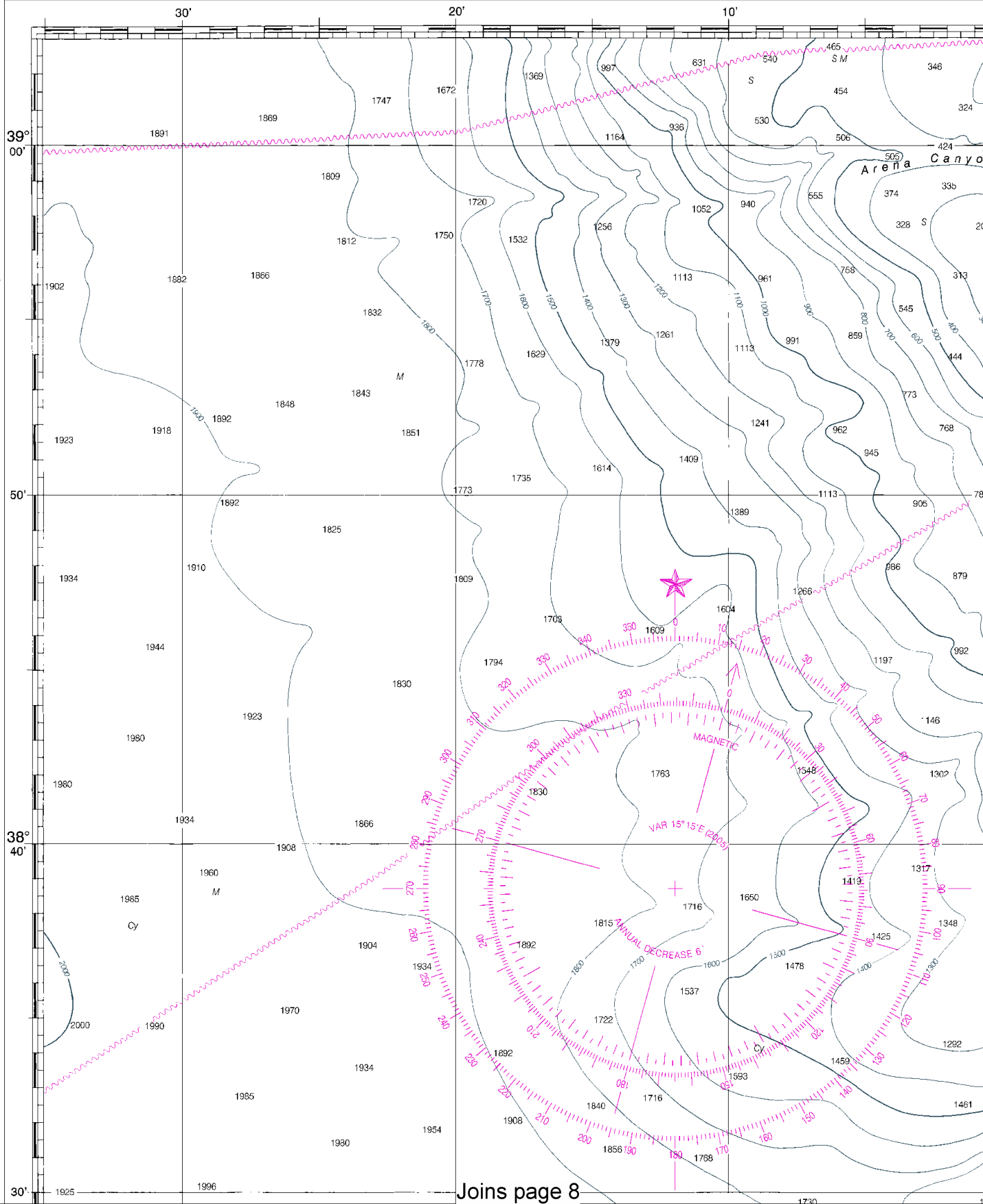
⚓ Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(?) Rocks that cover and uncover, with heights in feet above datum of soundings.
COLREGS: International Regulations for Preventing Collisions at Sea, 1972.

PRINT-ON-DEMAND CHARTS

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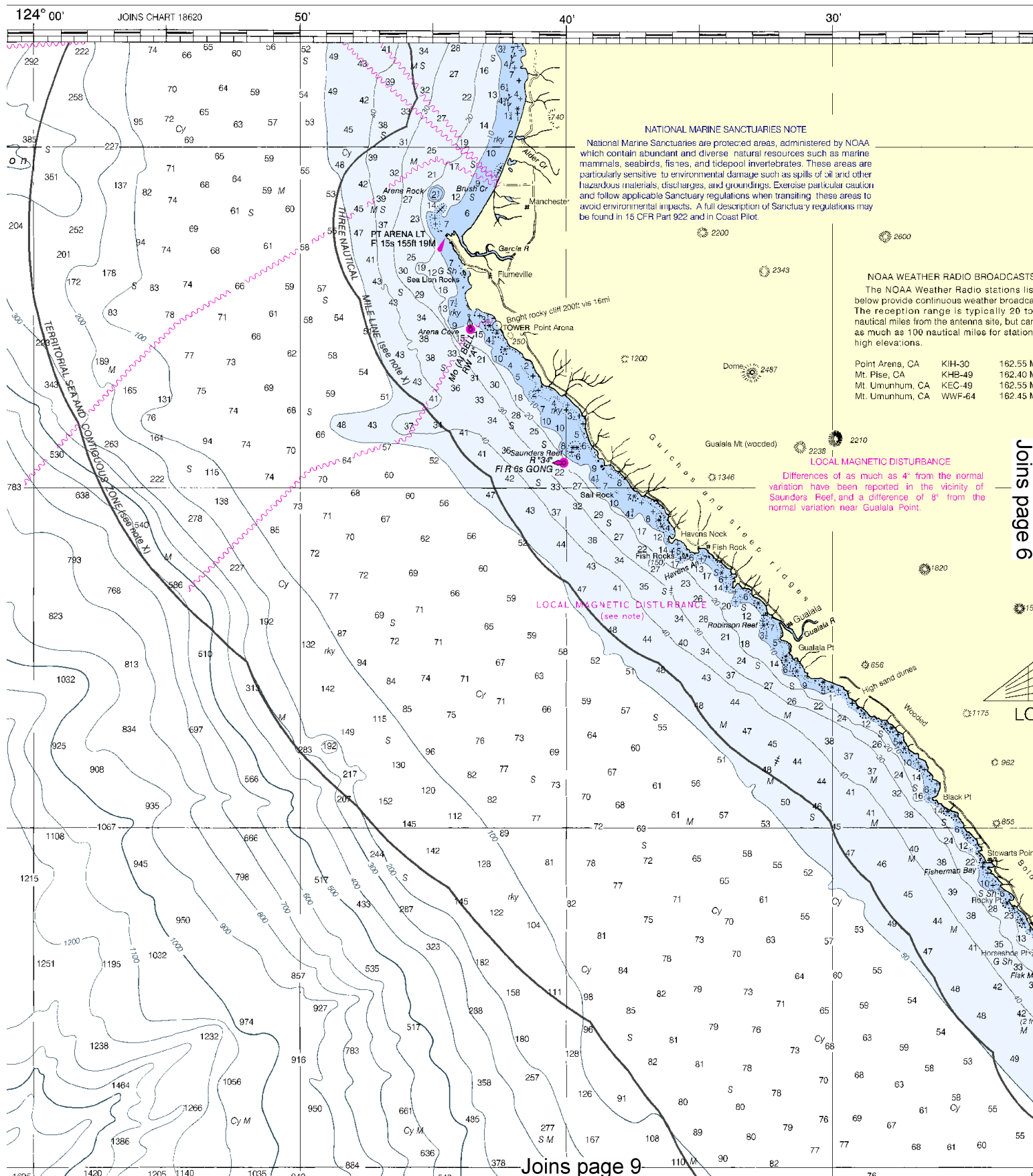
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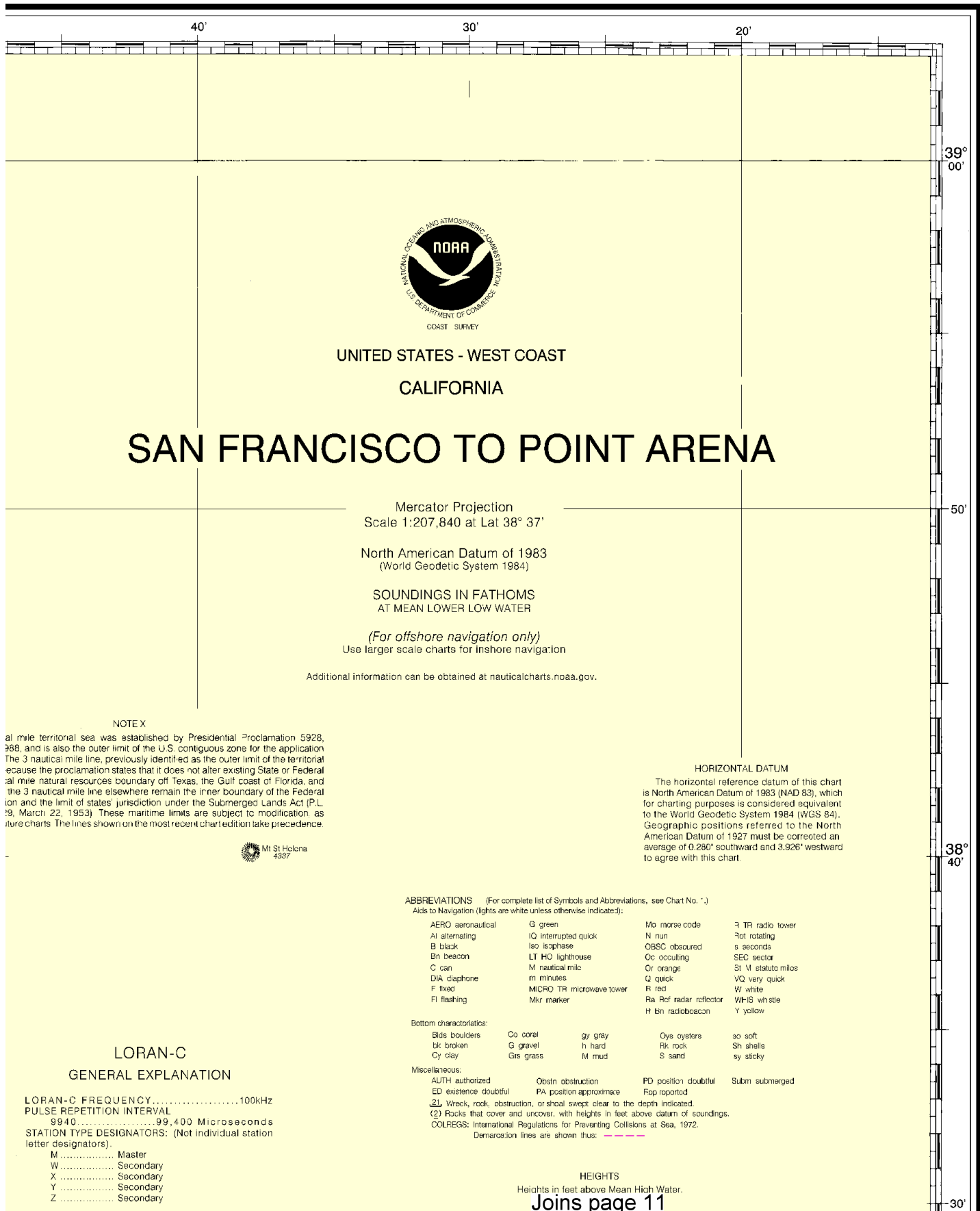


4





This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:277120. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



Joins page 4

30°

20°

10°

38°

00'

NORTH
PACIFIC
OCEAN

Joins page 12

8



Joins page 51

Joins page 10

Joins page 13

Cordell Bank

Joins page 6 Environmental Protection Agency (EPA).
Pilots appendix for addresses of
Loran Stations. Jumping subsequent to the survey
dates may have reduced the depths shown.

NOTE A
The project depth is 55 feet. For controlling
depths see chart 18649.

NOTE A
Navigation regulations are published in Chapter 2, U.S.
Coast Pilot 7. Additions or revisions to Chapter 2 are
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the regulations may be obtained at the Office of the Commander,
11th Coast Guard District in Alameda, California or at the
Office of the District Engineer, Corps of Engineers in
San Francisco, California
Refer to charted regulation section numbers.

WARNING
The prudent mariner will not rely solely on any single aid
to navigation, particularly on floating aids. See U.S. Coast
Guard Light List and U.S. Coast Pilot for details.

NOTE C
CAUTION
When the width of the passage between
Bodega Head and Bodega Rock is reduced by
breakers, the passage is unsafe and mariners
entering Bodega Bay from the sea should pass
south of red and white buoy "BA" located
southeast of Bodega Rock.

RADAR REFLECTORS
Radar reflectors have been placed on many
floating aids to navigation. Individual radar
reflector identification on these aids has been
omitted from this chart.

TRAF

One-way traffic
is recommended
between the points
signed to aid
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Traffic within
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channel 13 for

The San Franci
shown on this cha

Joins page 9



Joins page 14

GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
9940.....99,400 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M.....Master
W.....Secondary
X.....Secondary
Y.....Secondary
Z.....Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

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NOTE E AFFIC SEPARATION SCHEME

traffic lanes overprinted on this chart intended for use by all vessels traveling in the area. They have been designed in the prevention of collisions at the entrance to San Francisco Bay but are not intended in any way to supersede or alter the application of the Road Separation Zones in separate inbound and outbound traffic lanes of ship traffic. Separation Zones are used except for crossing purposes. Vessels are requested to stay outside the circulation zone centered on the San Francisco Lighted Horn Buoy SF. When affric lanes and separation zones are used in conjunction.

NOTE F PRECAUTIONARY AREA

The Precautionary Area may consist of the transition between the Main Ship Lane and one of the established traffic lanes. Vessels are advised to exercise extreme caution when within this area. The normal cruising area is indicated "PILOT AREA." When affric Lane Lighted Buoys "S", "W", or "N", vessels should contact the pilot boat on board for boarding instructions.

NOTE H San Francisco Bay Vessel Traffic Service is not charted. See charts 18645 and 18649.

Joins page 7

Obsn obstruction PD position doubtful Subm submerged
ED existence doubtful PA position approximate Fop reported
(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.
COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: ---

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

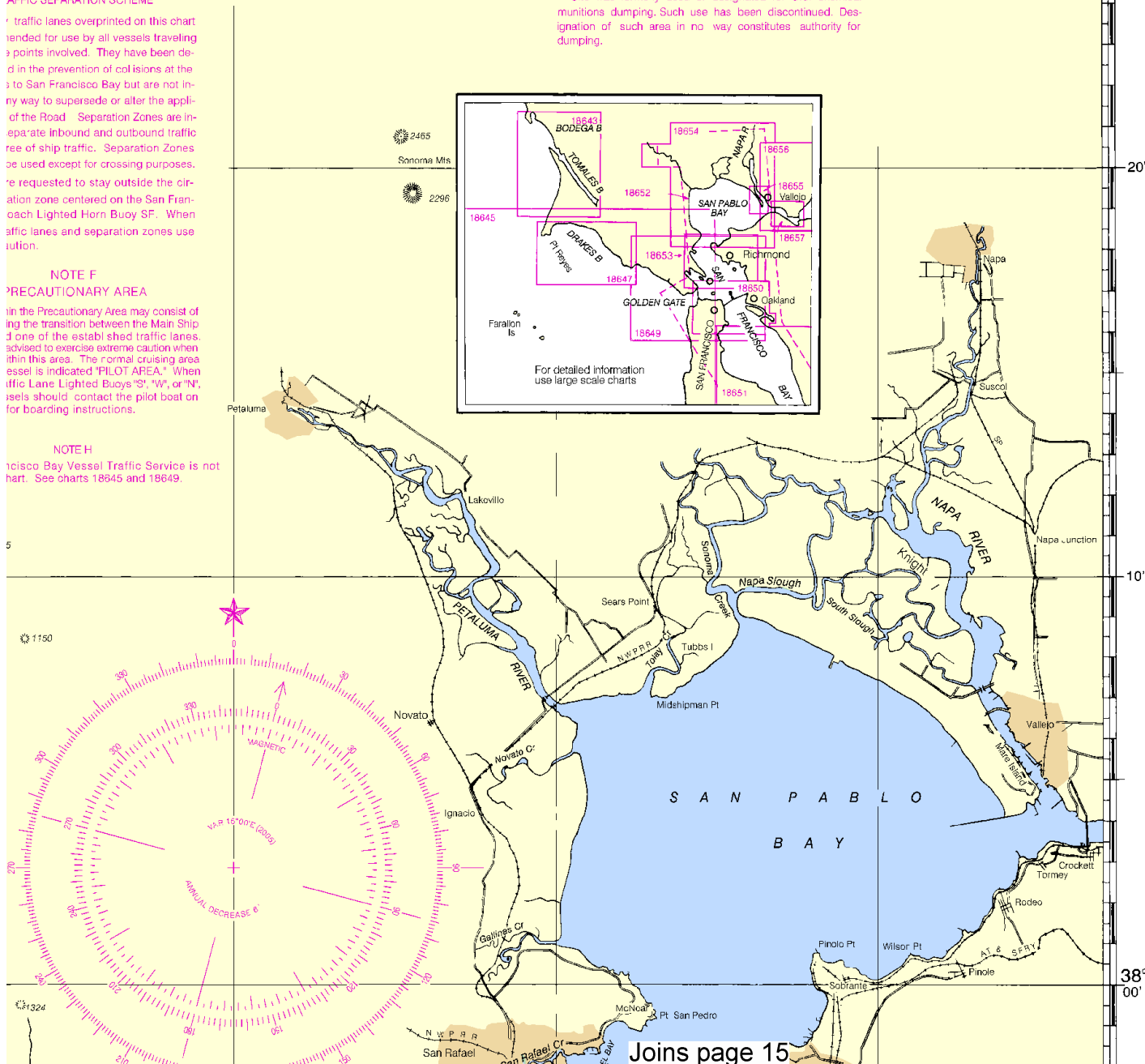
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

CAUTION

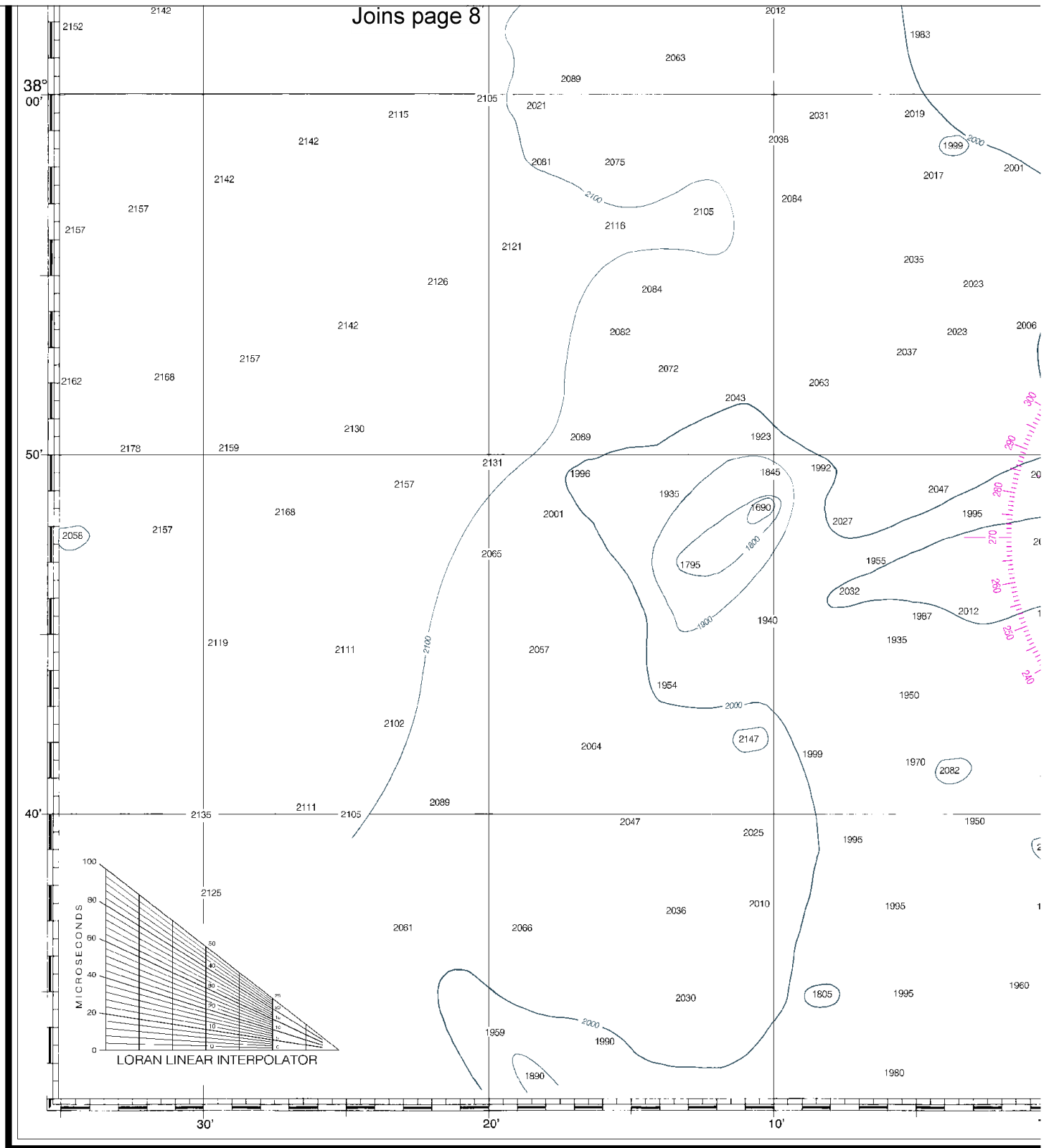
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NOTE G CHEMICAL MUNITION DUMPING AREA-RESTRICTION

Site was formerly used or designated for U.S. chemical munitions dumping. Such use has been discontinued. Designation of such area in no way constitutes authority for dumping.



Joins page 15

25th Ed., Aug. / 05 ■ Corrected through NM Aug. 20/05
Corrected through LNM Aug. 23/05

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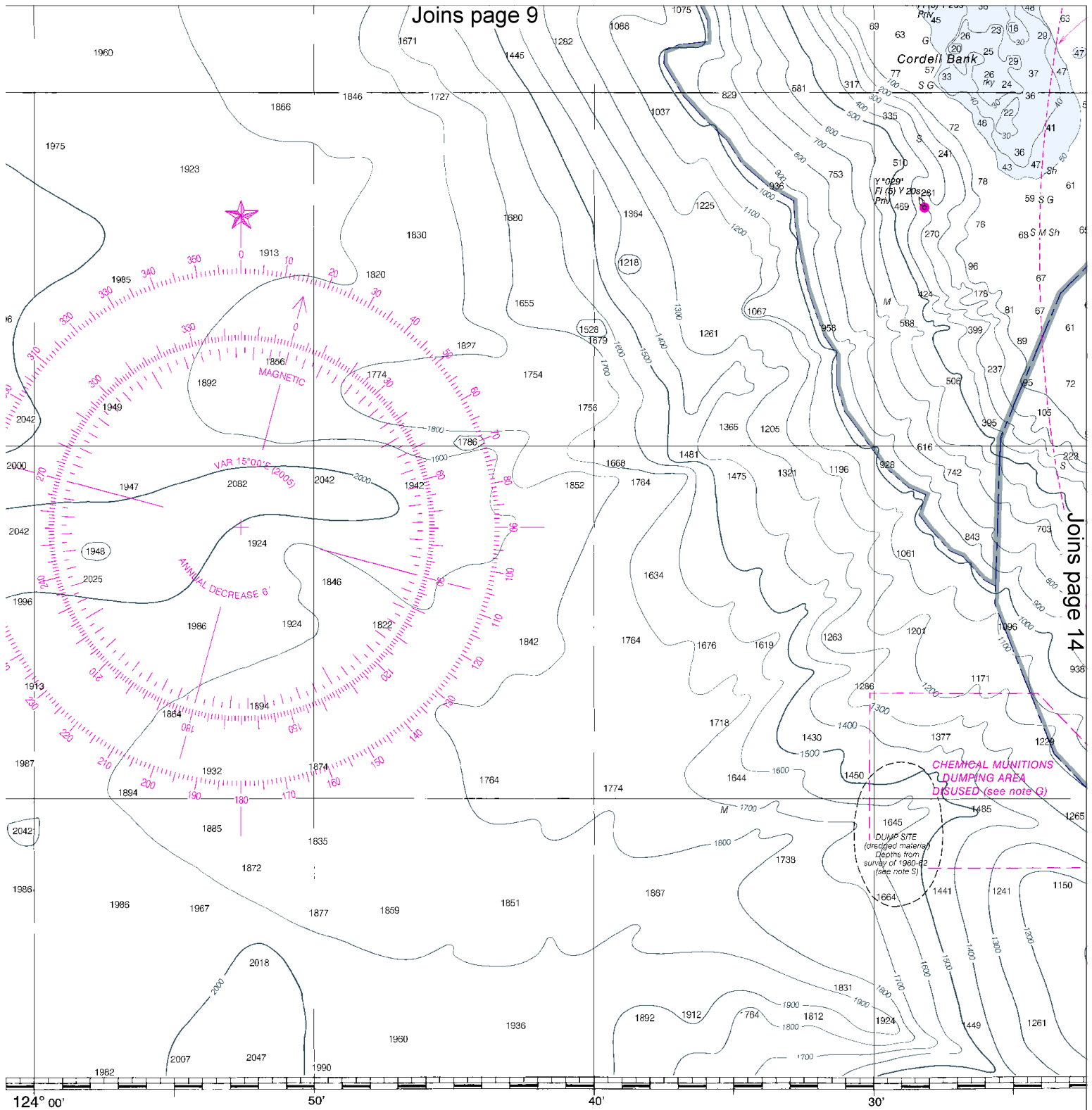
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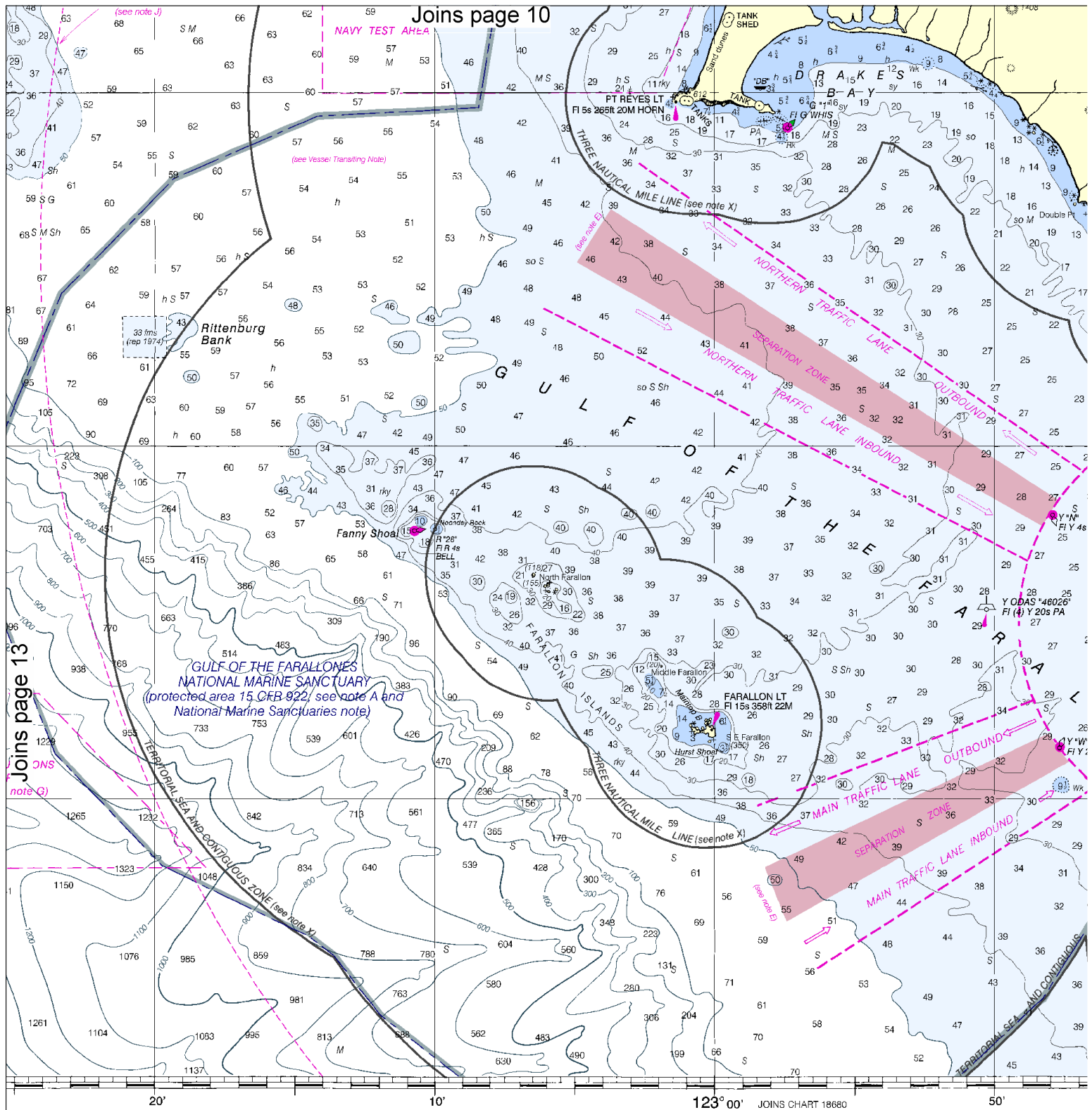




SOUNDINGS IN FATHOMS

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COAST SURVEY

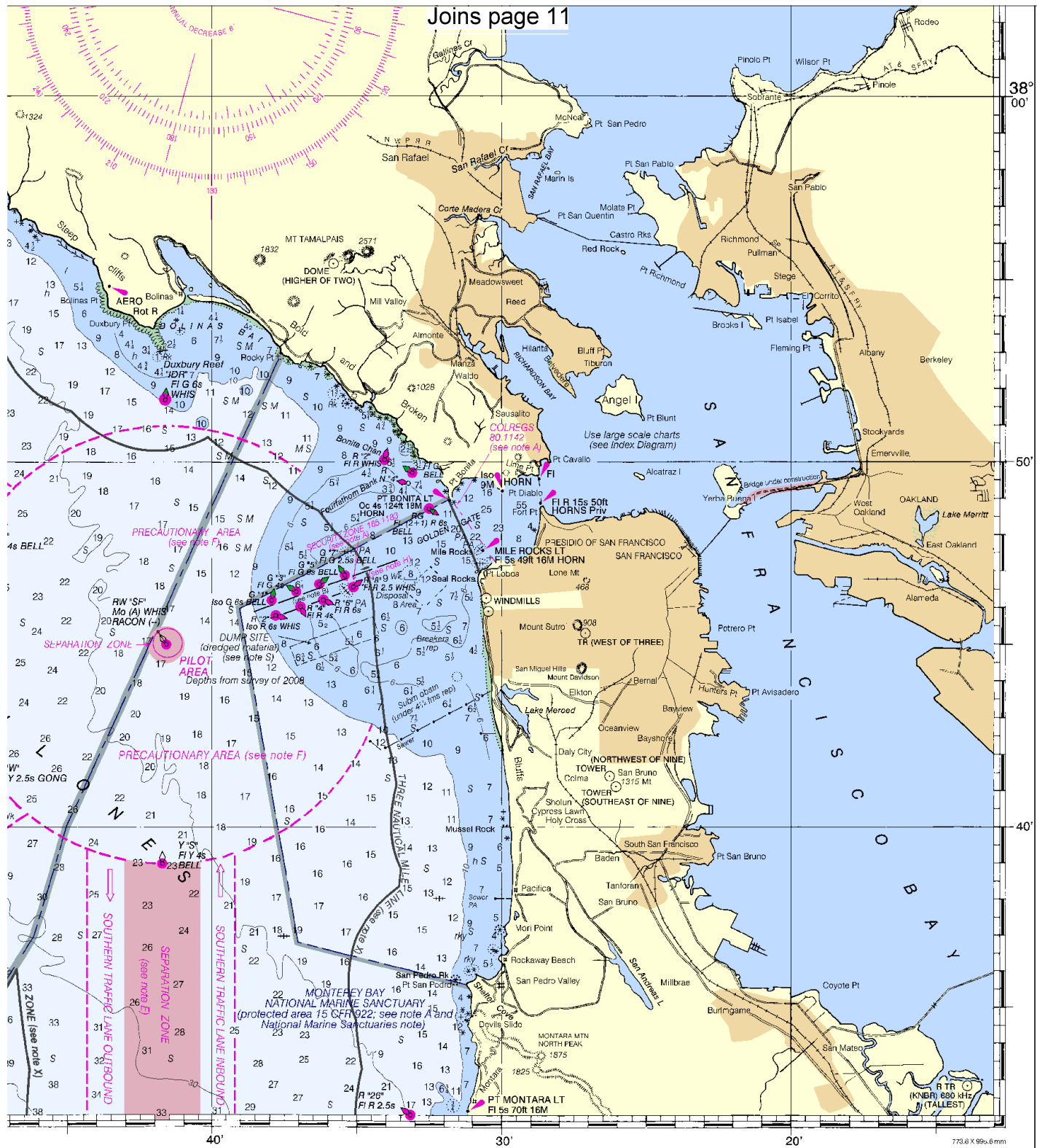


U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

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FATHOMS
FEET
METERS



38° 00'

50'

40'



ED. NO. 25



NSN 7642014011503
NGA REFERENCE NO. 18640

San Francisco to Point Arena
SOUNDINGS IN FATHOMS - SCALE 1:207,840

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LORAN-C OVERPRINTED

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue – 510-437-3700

Coast Guard Humboldt Bay – 541-756-9210

Coast Guard San Francisco – 415-399-3479

Commercial Vessel Assistance – 1-800-367-8222

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S., including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.